

No.

200000141

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

University of Georgia Research Foundation, Inc. (UGARF) and
University of Florida Agricultural Experiment Station (IAES)

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT, (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT, COMMON

'AGS 2000'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twentieth day of September, in the year two thousand two.

Attest:

[Signature]

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

[Signature]

Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

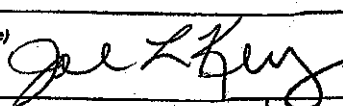
1. NAME OF OWNER University of Georgia Research Foundation, Inc. (UGARF) and University of Florida Agricultural Experiment Station (UFAES)		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME GA89482E7		3. VARIETY NAME 89482E7 A65 2000	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) Boyd Graduate Studies Building D. W. Brooks Drive Athens, GA 30602-7411		5. TELEPHONE (include area code) (706) 542-6512		FOR OFFICIAL USE ONLY PVPO NUMBER 200000141	
6. FAX (include area code) (706) 542-3837		7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation		8. IF INCORPORATED, GIVE STATE OF INCORPORATION Georgia	
9. DATE OF INCORPORATION 11/17/78		10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Dr. John Ingle University of Georgia Research Foundation, Inc. 630 Boyd Graduate Studies Building Athens, GA 30602-7411		FILING AND EXAMINATION FEES: \$ 2450 ⁰⁰ DATE 2/2/00 CERTIFICATION FEE: \$ 320 ²² DATE 5/23/02	
11. TELEPHONE (include area code) (706) 542-6512	12. FAX (include area code) (706) 542-3837	13. E-MAIL JI @ovpr.uga.edu		14. CROP KIND (Common Name) Wheat, Common	
15. GENUS AND SPECIES NAME OF CROP Triticum aestivum		16. FAMILY NAME (Botanical) Gramineae		17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act <input type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input checked="" type="checkbox"/> NO (If "no," go to item 22)			
20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input checked="" type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED			
22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)			
24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.					
SIGNATURE OF OWNER NAME (Please print or type) Joe L. Key		SIGNATURE OF OWNER NAME (Please print or type) 			
CAPACITY OR TITLE Executive Vice President	DATE	CAPACITY OR TITLE		DATE	

Exhibit A

Origin and Breeding History of 89482E7 'AGS 2000'

MAH
6/4/2001

'89482E7', a soft red winter wheat (Triticum aestivum L.), was cooperatively developed and released by the Georgia and Florida Agricultural Experiment Stations in 1999. 89482E7 was derived from a three way cross, 'Pioneer 2555'/PF 84301//'FL302'. The final cross was made in the fall of 1989. PF 84301 (PF 7576/PF 78901//CNT10/BR5) is an experimental line from Brazil with Al tolerance. The F1 was grown in the field during the 1990 season. The population was advanced from the F2 through F5 generations using the pedigree method of breeding with individual spikes selected for resistance to leaf rust (caused by *Puccinia recondita* (Roberge ex Desmaz), powdery mildew (caused by *Erysiphe graminis* DC. f. sp. *tritici* Em. Marchal), and septoria nodorum blotch (caused by *Stagonospora nodorum* (Berk) Castellani & E.G. Germano). Spikes were harvested, threshed individually and planted in single 1 meter headrows and were advanced to the next generation during the F2:3-, F3:4-, and F4:5-derived lines at Griffin, GA. 89482E7 is the F5:derived bulk of four head rows selected from 55 head rows. Breeder seed, produced in 1999, is in the F10 generation.

89482E7 was evaluated for agronomic performance in nursery plots in 1995, GA-FL state trials at five locations from 1996 to 1999, and in the Uniform Southern Soft Red Winter Wheat Nursery at 25 locations in 1999.

A increase strip of 89482E7, about 250 sq.ft., was planted in 1997 from a small increase plot and was rogued thoroughly for aberrant types. Seeds from this increase strip was planted in a Increase block at the Foundation Seed Farm in 1998 and rogued to remove variants. The current lot of Foundation seed (F11) derived from this multiplication has a small percentage of variants. The variant consists of 3/10,000 tall late green types, 3/10,000 awnless blue types, and 7/10,000 short awnless green types.

Approximately, 1000 spikes were selected from the large Increase block in 1998 and used to establish an improved lot of Breeder Seed. These heads were threshed and planted in an Increase block in 1999 and rogue for any variants. This Breeder seed of 89482E7 was provided to the Georgia Seed Development Commission and will be the source of future seed multiplications. The Breeder seed of 89482E7 is uniform and stable.

Breeder seed of 89482E7 will be maintained by the Georgia Agricultural Experiment Station, University of Georgia, Georgia Station, Griffin, GA 30223-1797.

Exhibit A

PF 84301, (PF 7576/PF 78901//CNT10/BR5) is an elite experimental line obtained from the National Wheat Improvement Center, EMBRAPA, Passo Fundao, Rio Grande du Sol, Brazil.

'A6S 2000'

MAH
6/4/2001
'89482E7' has been observed for 7 generations of reproduction and 3 years during the seed increase period and is stable and uniform.

The variant consists of 3/10,000 tall late green types, 3/10,000 awnless blue types, and 7/10,000 short awnless green types.

Exhibit B

'89482E7' is most similar to 'FL 302'; however, 89482E7 has a distinct blue-greenish plant color (wax present on its leaf sheath) at boot stage while FL 302 has a green color (no wax present on its leaf sheath).

Exhibit C

Flag leaf: not twist

Coleoptile-anthocyanin: absent

Peduncle: present

Exhibit B

Novelty Statement

'AGS 2000'

MAH
6-4-2001

89482E7 is a soft red winter wheat, awned, and white chaffed. 89482E7 is most similar in appearance to FL 302 in plant type. 89482E7 has a blue-greenish plant color at boot stage while FL 302 has a green color. It has wax present on its leaf sheath while FL 302 has the wax absent on its leaf sheath. 89482E7 possesses the 1B/1R translocation while FL 302 does not have the translocation, data provided by USDA-ARS, Lincoln, NE.

In comparison to FL 302, 89482E7 (Lr2a,9,+) is resistant to leaf rust races, TDRL, MCRQ, CBRQ, and MBTL while FL 302 (Lr10) is susceptible to these specific races.

MAR.18.1998 11:49AM

UGA RESEARCH FOUNDATION

NO.576 P.6/10

EXHIBIT

U.S. DEPARTMENT OF AGRICULTURE

C

(Wheat)

AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION
BELTSVILLE, MARYLAND 20705OBJECTIVE DESCRIPTION OF VARIETY
WHEAT (*Triticum* spp.)

NAME OF APPLICANT(S)

University of Georgia Research Foundation, Inc.

ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code)

FOR OFFICIAL USE ONLY

PVPO NUMBER

VARIETY NAME

89482E7

'AGS 2000'

MAH
6-4-01TEMPORARY OR EXPERIMENTAL
DESIGNATION

PLEASE READ ALL INSTRUCTIONS CAREFULLY; Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (e.g. or) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: _____

Please answer all questions for your variety; lack of response may delay progress of your application.

1. KIND:

1=Common

2=Durum

3=Club

4=Other (SPECIFY) _____

2. VERNALIZATION:

1=Spring

2=Winter

3=Other (SPECIFY) _____

3. COLEOPTILE ANTHOCYANIN:

1=Absent

2=Present

4. JUVENILE PLANT GROWTH:

1=Prostrate

2=Semi-erect

3=Erect

5. PLANT COLOR (boot stage):

1 = Yellow-Green

2 = Green

3 = Blue-Green

6. FLAG LEAF (boot stage):

1 = Erect

2 = Recurved

1 = Not Twisted

2 = Twisted

7. EAR EMERGENCE:

Number of Days Earlier Than 1FL302

Number of Days Later Than _____

8. ANTHR COLOR:

1 = YELLOW

2 = PURPLE

9. PLANT HEIGHT (from soil to top of head, excluding awns):

cm Taller Than _____

cm Shorter Than _____

FL302

10. STEM:

A. ANTHOCYANIN

☐ 1 = Absent 2 = Present

B. WAXY BLOOM

☐ 2 1 = Absent 2 = Present

C. HAIRINESS (last internode of rachis)

☐ 1 1 = Absent 2 = Present

D. INTERNODE (SPECIFY NUMBER)

☐ 1 1 = Hollow 2 = Semi-solid 3 = Solid

E. PEDUNCLE

2 ☒ 1 = Absent 2 = Present

☐ 14 cm Length

11. HEAD (at Maturity):

A. DENSITY

☐ 2 1 = Lax 2 = Middense 3 = Dense

B. SHAPE

☐ 2 1 = Tapering 2 = Strap 3 = Clavate 4 = Other (SPECIFY)

C. CURVATURE

☐ 1 1 = Erect 2 = Inclined 3 = Recurved

D. AWNEDNESS

☐ 4 1 = Awnless 2 = Apically Awnletted 3 = Awnletted 4 = Awned

12. GLUMES (at Maturity):

A. COLOR

☐ 1 1 = White 2 = Tan 3 = Other (SPECIFY)

B. SHOULDER

☐ 2 1 = Wanting 2 = Oblique 3 = Rounded 4 = Square 5 = Elevated 6 = Apiculate

C. BEAK

☐ 3 1 = Obtuse 2 = Acute 3 = Acuminate

D. LENGTH

☐ 3 1 = Short (ca. 7mm) 2 = Medium (ca. 8mm) 3 = Long (ca. 9mm)

E. WIDTH

☐ 3 1 = Narrow (ca. 3mm) 2 = Medium (ca. 3.5mm) 3 = Wide (ca. 4mm)

13. SEED:

A. SHAPE

☐ 1 1 = Ovate 2 = Oval 3 = Elliptical

B. CHEEK

☐ 1 1 = Rounded 2 = Angular

C. BRUSH

☐ 1 1 = Short 2 = Medium 3 = Long

☐ 1 1 = Not Collared 2 = Collared

D. CREASE

☐ 1 1 = Width 60% or less of Kernel
2 = Width 80% or less of Kernel
3 = Width Nearly as Wide as Kernel

☐ 2 1 = Depth 20% or less of Kernel
2 = Depth 35% or less of Kernel
3 = Depth 50% or less of Kernel

200000141

1998
6/4/2001

13. SEED: (continued)

E. COLOR

☐ 3

1 = White

2 = Amber

3 = Red

4 = Other (SPECIFY) _____

F. TEXTURE

☐ 2

1 = Hard

2 = Soft

G. PHENOL REACTION (see instructions):

☐

1 = Ivory

2 = Fawn

3 = Light Brown

4 = Dark Brown

5 = Black

14. DISEASE: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

PLEASE INDICATE THE SPECIFIC RACE OR STRAIN TESTED

Stem Rust (*Puccinia graminis* f. sp. *tritici*)

☐ 2

RKRO RTQQ QTHS HKCJ

Stripe Rust (*Puccinia striiformis*)

☐ 2

Tan Spot (*Pyrenophora tritici-repentis*)

☐ 0

Halo Spot (*Selenophoma donacis*)

☐ 0

Septoria nodorum (Glume Blotch)

☐ 1

Septoria avenae (Speckled Leaf Disease)

☐ 0

Septoria tritici (Speckled Leaf Blotch)

☐ 1

Scab (*Fusarium* spp.)

☐ 1

"Black Point" (Kernel Smudge)

☐ 2

Barley Yellow Dwarf Virus (BYDV)

☐ 3

Soilborne Mosaic Virus (SBMV)

☐ 1

Wheat Yellow (Spindle Streak) Mosaic Virus

☐ 1

Wheat Streak Mosaic Virus (WSMV)

☐ 0

Other (SPECIFY) _____

☐

Other (SPECIFY) _____

☐

Other (SPECIFY) _____

☐

Leaf Rust (*Puccinia recondita* f. sp. *tritici*)

☐ 2

TDRL, TLGG, PLMQ, MCRO, CBRO, MBTL

Loose Smut (*Ustilago tritici*)

☐ 0

Flag Smut (*Urocystis agropyri*)

☐ 0

Common Bunt (*Tilletia tritici* or *T. laevis*)

☐ 0

Dwarf Bunt (*Tilletia controversa*)

☐ 0

Karnal Bunt (*Tilletia indica*)

☐ 0

Powdery Mildew (*Erysiphe graminis* f. sp. *tritici*)

☐ 2

Yuma, 127, Pm4, Aso

"Snow Molds"

☐ 0

Common Root Rot (*Fusarium*, *Cochliobolus* and *Bipolaris* spp.)

☐ 0

Rhizoctonia Root Rot (*Rhizoctonia solani*)

☐ 0

Black Chaff (*Xanthomonas campestris* pv. *translucens*)

☐ 0

Bacterial Leaf Blight (*Pseudomonas syringae* pv. *syringae*)

☐ 0

Other (SPECIFY) _____

☐

Other (SPECIFY) _____

☐

Other (SPECIFY) _____

☐

Other (SPECIFY) _____

☐

MAR.18.1998 11:51AM

UGA RESEARCH FOUNDATION

NO.576

P.10/10

Page 4

15. INSECT: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

PLEASE SPECIFY BIOTYPE (where needed)

Hessian Fly (*Mayetiola destructor*)☐ 2

M, O

Other (SPECIFY) _____

☐Stem Sawfly (*Cephus* spp.)☐ 0

Other (SPECIFY) _____

☐Cereal Leaf Beetle (*Oulema melanopa*)☐ 0

Other (SPECIFY) _____

☐Russian Aphid (*Diuraphis noxia*)☐ 0

Other (SPECIFY) _____

☐Greenbug (*Schizaphis graminum*)☐ 0

Other (SPECIFY) _____

☐

Aphids

☐ 0

Other (SPECIFY) _____

☐

16. ADDITIONAL INFORMATION ON ANY ITEM ABOVE, OR GENERAL COMMENTS:

Exhibit D

Additional Description of 89482E7

'AgS 2000'

89482E7 is a common soft red winter wheat, *Triticum aestivum* L. bred and developed by the University of Georgia, Georgia Agricultural Experiment Stations and developed jointly by Jerry W. Johnson and Ron D. Barnett with the University of Florida, Florida Agricultural Experimental Station.

89482E7 is a medium maturing, high yielding, high test weight, awned wheat with resistant to current races of leaf rust, Puccinia recondita (Roberge ex Desmaz) and predominant biotype (biotype O) of Hessian flies, (Mayetiola destructor (Say), and moderately resistant to powdery mildew, (Erysiphe graminis DC. f. sp. tritici Em. Marchal) in Georgia.

Head emergence (114 Julian days) is about 4 days earlier than FL 302. Plant height of 89482E7 (87 cm) is 1 cm shorter than FL 302. The spikes are erect at maturity, middense, strap, and awned. The glumes are midwide and long with oblique shoulder and acuminate beaks. Kernels are red and ovate; the kernel brush is short; the kernel cheek is rounded. and the kernel crease is shallow in width and medium in depth. Kernel weight is 38 mg.

Milling and baking quality characteristics of 89482E7 are rated as acceptable for soft red winter wheat use by the USDA-Soft Wheat Quality Laboratory, Wooster, OH. Information on the milling and baking quality characteristics is also included in a quality report. Additional information is presented in Tables 1-13 attached to this Exhibit.

MAH
6/4/2001

RYE CHROMOSOMES

1	FL 302	non-1RS
2	COKER 9835	non-1RS
3	COKER 9663	non-1RS
4	MASON	non-1RS
5	MO 94-317	non-1RS
6	AR 494B-2-2	non-1RS
7	FL92944RCX	1BL.1RS
8	LA87167-D8-10-2	non-1RS
9	NCV93-1007	non-1RS
10	LA 8952B7-3-1	non-1RS
11	LA 90239B19-2-4	non-1RS
12	LA 9012B121-3-1-4	non-1RS
13	GA89482E7 'A6S 2000'	1BL.1RS
14	GA881186E48	non-1RS
15	GA891283LE18	non-1RS
16	BL 930390	non-1RS
17	BL 930138	non-1RS
18	BL 931127	non-1RS
19	TX94D 4465	non-1RS
20	SC92 1285	non-1RS
21	SC92 1299	non-1RS
22	TX90-83	non-1RS
23	FL 85225	1BL.1RS
24	FL88 68	non-1RS
25	AR 584A-3-1	non-1RS
26	XW662	non-1RS
27	XW663	1BL.1RS
28	NC94-7197	1BL.1RS
29	NCV94-6049	1BL.1RS
30	VA96-54-372	non-1RS
31	TNX97-1	non-1RS
32	AP-D93*7163	1BL.1RS
33	AP-D94-5389	non-1RS
34	AP-D94-5282	1BL.1RS

data provided by R.A. Graybosch, USDA-ARS,
Lincoln, NE

MAH
6-4-2001

LEAF RUST

200000141

		Seedling Reactions										Postulated Seedling genes***
		Reactions produced by NA race*										
		TDRL	PLMQ	TLGG	SCDG	MCRQ	MDRB	BBBB	CBRQ	LBBQ	MBTL	
1	FL 302	3	3;	.	.	3	.	.	3	3	3	10
2	Coker 9835	;-3	.	3	.	.	.	.	.	.	.	2a, 9, 11
3	Coker 9663	.	3;	.	.	.	.	0;	.	.	.	+
4	Mason	.	.	.	.	.	.	0;	.	.	.	+
5	MO 94 317	3	3;	3;	.	3	3;	.	3	.	.	10, 11, +
6	AR 494B-2 2	3	3;	3;	.	3	3	.	.	3	3	10, +
7	FL92944RCX	.	.	.	1c	1c2	.	0;	1c	.	.	+
8	LA87167-D8-10 2	.	.	.	.	2c	.	.	3;	1c;	1c	+
9	NCV93 1007	3	.	.	.	.	3	.	0;	.	3	24, +
10	LA8952B7-3-1	.	.	.	.	.	.	0;	.	.	.	+
11	LA90239B19-2-4	.	.	.	.	.	.	.	.	.	.	+
12	LA9012B121-3-1-4	.	.	3	.	.	.	0;	.	.	.	2a, 9, +
13	GA89482E7-165 2000	.	.	.	.	1c2	.	.	1c	3	.	+
14	GA881186E48	3	1c	1c	1c	3	3	.	1c	1c	3	3, 11, +
15	GA891283LE18	3	.	3	.	3	3	.	1c3	3;	3	11, +
16	BL930390	;-3	.	;-3	;-3	.	.	.	1c	.	.	+
17	BL930138	;-3	;-3	3	.	3	.	.	3	.	1c2	10, 11, 18
18	BL931127	3;	3	.	.	3	.	.	3	3	1c2	11, 18, +
19	TX94D4465	3	.	.	1c	.	0;	.	.	.	.	2a, 10
20	SC921285	3;	3	.	1c	3	1c3	.	3	.	3	3, 10, +
21	SC921299	3;	3	.	1c	.	1c3	.	3;	.	3;	10, 18, +
22	TX90-83	;-3	3	3	1c	3	3	.	3;	.	3;	+
23	FL85225	.	.	.	.	.	.	.	.	.	.	+
24	FL8868	.	3	3	.	.	.	.	.	.	.	9
25	AR584A-3-1	.	3;	.	.	.	0;	.	.	.	.	+
26	XW662	1c3	.	.	.	3	1c	.	.	.	1c2	10, 11, 1
27	XW663	.	.	.	2c2	2c	1c	.	1c	.	.	+
28	NC94 7197	.	.	.	2c2	3	.	.	1c2	1c	.	3, 26, +
29	NCV94-6049	.	.	.	3	2+	.	.	3	.	.	+
30	VA96-54 372	3	.	3	1c	3	3	.	1c	1c	3	+
31	TNX97 1	3	3	3	3	3	3	3	3	3	3	0
32	AP D93*7163	.	.	.	1c	1c	.	.	1c	.	.	+
33	AP-D94-5389	2	.	3	.	3	1c	.	3	3	1c3	10, 18
34	AP-D94 5282	.	2	.	3;1c	3	.	.	3	3	.	10, 18

* Single genes tested = 1, 2a, 2c, 3, 3ka, 9, 10, 11, 16, 17, 18, 24, 26, 30

**Virulence Formula:

TDRL = 1, 2a, 2c, 3, 3ka, 10, 11, 24, 30

PLMQ = 1, 2c, 3, 3ka, 9, 10, 18, 30

TLGG = 1, 2a, 2c, 3, 9, 11, 18

SCDG = 1, 2a, 2c, 11, 17, 26

MCRQ = 1, 3, 3ka, 10, 11, 18, 26, 30

MDRB = 1, 3, 3ka, 11, 24, 30

BBBB = no virulence

CBRQ = 3, 3ka, 10, 11, 18, 30

LBBQ = 1, 10, 18

MBTL = 1, 3, 3ka, 10, 11, 17, 30

***0 = no gene(s) detected with these Lr combinations; += Lr gene(s) present but unable to identify with these Lr virulence combinations

data provided by D.L. Long, USDA-ARS Cereal Disease Laboratory, St. Paul, MN

STEM RUST

Seedling reactions of 1997-98 Uniform Southern Soft Red Winter Wheat Nursery entries to selected isolates of wheat stem rust. (USDA-ARS, Cereal Disease Laboratory, University of Minnesota, St. Paul, MN 55108, by D.V. McVey.)

	TPMK	HKCJ	RKRQ	RTQQ	QTHJ	RTQS	QFCQ
1 FL 302	2	S	0	1	S	12N	0
2 Coker 9835	S	0	S	S	0	S	0
3 Coker 9663	0	0	S	0	0	S	0
4 Mason	0	0	0	0	0	0	0
5 MO 94-317	0	-	0	2BN	0	0	S
6 AR 494B-2-2	S	S	0	2BN	S	0	0
7 FL 92944RCX	2=	1	0	1	0	0	0
8 LA 87167-D8-10-2	0	0	0	0	0	0	0
9 NCV 93-1007	0	0	0	1	0	0	2-
10 LA 8952B7-3-1	S	0	0	2-	0	0	0
11 LA 90239B19-2-4	2	2	2	2	2+	2	2
12 LA 9012B121-3-1-4	0	0	0	S	0	S	S
13 GA 89482E7 'AGS 2000'	2=	2=	1-	1	0	1-N	0
14 GA 881186E48	S	S	0	2BN	S	S	S
15 GA 891283LE18	S	S	2	2	S	2	S,2
16 BL 930390	S	S	0	2BN	2	2	S
17 BL 930138	0	0	0	2BN	0	0	0
18 BL 931127	0	0	0	2	0	0	0
19 TX 94D4465	S	S	S	2	S	0	S
20 SC 921285	0	0	0	2BN	0	0	2+
21 SC 921299	0	0	0	2BN	0	2	2N
22 TX 90-83	S	S	0	1	0	2=	1N
23 FL 85225	2=	0	0	1	0	0	-
24 FL 8868	S	0	0	2BN	0	0	21
25 AR 584A-3-1	S	S	S	S	S	S	S
26 XW 662	S	S	1-N	0	0	1	2
27 XW 663	2=	2=	2=	2=	0	1	2=
28 NC 94-7197	0	0	0	0	0	0	1-N
29 NCV 94-6049	2=	0	2=	2=	0	0	0
30 VA 96-54-372	2	2	23	0	S	23	2-C
31 TN X97-1	S	0	S	S	0	S	1N
32 AP-D93-7163	0	0	2=	2=	0	0	0;
33 AP-D94-5389	0	0	0	0;	0	0	1
34 AP-D94-5282	2=	0	0	0;	0	1	2=

Set I	Sr 5	Sr 21	Sr 9e	Sr 7b
Set II	Sr 11	Sr 6	Sr 8	Sr 9g
Set III	Sr 36	Sr 9b	Sr 30	Sr 13-17
Set IV	Sr 9a	Sr 9d	Sr 10	Tmp

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

REGION 2

= warmer, higher leaf rust = Marianna FL;
Griffin GA; Brooksville MS; Kinston NC;
Florence SC; St. Matthews SC

LAB NO.		MILLING QUALITY SCORE	BAKING QUALITY SCORE	COMBINED QUALITY SCORE	MICR T.W. LB/BU
****	STANDARD = COKER 9835 #3686	100.0 A	100.0 A	100.0 A	55.9
3685	1 FLORIDA 302	102.1 A	98.5 B	98.5 B	55.3
3686	2 COKER 9835	100.0 A	100.0 A	100.0 A	55.9
3687	3 COKER 9663	99.8 B	84.8 E	84.8 E	58.5
3688	4 MASON	102.6 A	96.7 B	96.7 B	57.3
3689	5 MO 94-317	105.5 A	108.4 A	105.5 A	55.6
3690	6 AR 494B-2-2	101.0 A	96.0 B	96.0 B	58.1
3691	7 FL92944RCX	98.7 B	97.6 B	97.6 B	54.6 *
3692	8 LA87167-D8-10-2	99.5 B	97.4 B	97.4 B	58.5
3693	9 NCV93-1007	102.4 A	102.8 A	102.4 A	57.1
3694	10 LA8952B7-3-1	92.3 C	84.0 E	84.0 E	59.1
3695	11 LA90239B19-2-4	93.0 C	96.4 B	93.0 C	58.1
3696	12 LA9012B121-3-1-4	98.5 B	103.2 A	98.5 B	58.9
3697	13 GA89482E7 'A6S 2000'	104.1 A	98.2 B	98.2 B	58.7
3698	14 GA881186E48	96.3 B	97.7 B	96.3 B	58.6
3699	15 GA891283LE18	96.2 B	100.8 A	96.2 B	57.7
3700	16 BL930390	95.2 B	93.0 C	93.0 C	54.3 *
3701	17 BL930138	99.6 B	100.9 A	99.6 B	59.9
3702	18 BL931127	100.4 A	89.0 D	89.0 D	58.9
3703	19 TX94D4465	102.1 A	100.6 A	100.6 A	60.3
3704	20 SC921285	89.5 D	93.3 C	89.5 D	57.5
3705	21 SC921299	91.4 C	92.2 C	91.4 C	57.8
3706	22 TX90-83	94.0 C	45.1 F	45.1 F	55.3
3707	23 FL85255	91.0 C	76.7 F	76.7 F	57.9
3708	24 FL8868	103.4 A	105.9 A	103.4 A	55.2
3709	25 AR584A-3-1	101.4 A	100.7 A	100.7 A	57.9
3710	26 XW662	101.0 A	100.2 A	100.2 A	57.8
3711	27 XW663	98.4 B	87.9 D	87.9 D	59.8
3712	28 NC94-7197	100.5 A	98.5 B	98.5 B	60.9
3713	29 NCV94 6049	102.8 A	103.1 A	102.8 A	57.5
3714	30 VA96-54-372	99.1 B	93.4 C	93.4 C	56.5
3715	31 TNX97	104.3 A	105.1 A	104.3 A	57.8
3716	32 AP-D9 7163	102.2 A	98.8 B	98.8 B	58.0
3717	33 AP-D94-5389	96.4 B	96.0 B	96.0 B	58.9
3718	34 AP-D94-5282	87.7 D	86.6 D	86.6 D	57.2

data provided by P.L. Finney, USDA-ARS, Soft Wheat Quality Lab, Wooster, OH

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

200000141

REGION 2

= warmer, higher leaf rust = Marianna FL; SOFT.
Griffin GA; Brooksville MS; Kinston NC; EQUIV
Florence SC; St. Matthews SC

FLOUR
YIELD

FLOUR
PROT.

MICRO
AWRC

LAB
NO.

STANDARD = COKER 9835 #3686

3685	1	FLORIDA 302	68.8	69.3	7.88	61.7
3686	2	COKER 9835	63.9 *	71.4	8.42	55.1
3687	3	COKER 9663	68.8	69.3	7.88	61.7
3688	4	MASON	56.9 Q	70.5	7.63	55.8
3689	5	MO 94-317	66.1	70.1	8.27	56.4
3690	6	AR 494B-2-2	69.9	71.4	8.21	55.3
3691	7	FL92944RCX	59.4 Q	71.0	8.42	54.6
3692	8	LA87167-D8-10-2	68.0	69.2	8.20	59.9
3693	9	NCV93-1007	56.4 Q	70.9	8.51	52.7
3694	10	LA8952B7-3-1	63.0 *	72.2	8.60	53.6
3695	11	LA90239B19-2-4	58.0 Q	68.4 *	8.84	55.6
3696	12	LA9012B121-3-1-4	64.8 *	67.8 *	8.37	60.7
3697	13	GA8948ZE7 'A65 2000'	63.4 *	69.3	8.04	56.0
3698	14	GA881186E48	64.8 *	71.9	8.37	59.8
3699	15	GA891283LE18	62.3 *	68.9	8.40	55.9
3700	16	BL930390	65.7	68.5	8.14	57.6
3701	17	BL930138	66.0	68.6	7.75	58.6
3702	18	BL931127	60.6 Q	69.9	8.72	54.6
3703	19	TX94D4465	60.8 Q	70.1	8.70	56.2
3704	20	SC921285	60.7 Q	70.9	8.41	55.6
3705	21	SC921299	63.1 *	67.2 Q	9.46	59.7
3706	22	TX90-83	63.9 *	67.6 Q	9.48	60.1
3707	23	FL85255	49.0 Q	70.7	9.87	62.1
3708	24	FL8868	59.9 Q	68.0 *	9.31	59.2
3709	25	AR584A-3-1	66.7	70.4	8.60	56.3
3710	26	XW662	60.4 Q	71.3	8.50	52.4
3711	27	XW663	59.7 Q	73.5	7.69	52.0
3712	28	NC94-7197	58.3 Q	69.9	8.94	55.1
3713	29	NCV94-6049	57.6 Q	71.0	8.31	53.8
3714	30	VA96-54-372	63.3 *	72.1	8.58	55.3
3715	31	TNX97-1	64.9 *	69.5	7.61	58.2
3716	32	AP-D93*7163	65.8	72.2	7.96	52.8
3717	33	AP-D94-5389	61.8 *	70.7	8.75	54.8
3718	34	AP-D94-5282	59.1 Q	69.3	8.40	54.7
			60.4 Q	67.2 Q	9.13	57.3

data provided by P.L. Finney, USDA-ARS, Soft Wheat Quality Lab, Wooster, OH

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

REGION 2

= warmer, higher leaf rust = Marianna FL; COOKIE TOP
Griffin GA; Brooksville MS; Kinston NC; DIAM. GR.
Florence SC; St. Matthews SC

LAB NO.				
****		STANDARD = COKER 9835 #3686	17.68	4
3685	1	FLORIDA 302	17.68	5
3686	2	COKER 9835	17.68	4
3687	3	COKER 9663	17.30 *	5
3688	4	MASON	17.51	4
3689	5	MO 94-317	18.28	5
3690	6	AR 494B-2-2	17.73	6
3691	7	FL92944RCX	17.48	2
3692	8	LA87167-D8-10-2	18.38	6
3693	9	NCV93-1007	18.35	4
3694	10	LA8952B7-3-1	17.22 *	2
3695	11	LA90239B19-2-4	17.55	3
3696	12	LA9012B121-3-1-4	18.05	4
3697	13	GA89482E7 'A65 2000'	17.63	4
3698	14	GA881186E48	17.70	4
3699	15	GA891283LE18	17.72	4
3700	16	BL930390	17.34 *	4
3701	17	BL930138	18.25	6
3702	18	BL931127	17.35 *	4
3703	19	TX94D4465	17.90	6
3704	20	SC921285	17.46	2
3705	21	SC921299	17.38 *	3
3706	22	TX90-83	15.89 Q	1
3707	23	FL85255	16.80 Q	2
3708	24	FL8868	18.06	4
3709	25	AR584A-3-1	18.03	6
3710	26	XW662	18.48	4
3711	27	XW663	17.39 *	4
3712	28	NC94-7197	18.10	5
3713	29	NCV94-6049	17.93	6
3714	30	VA96-54-372	17.40 *	3
3715	31	TNX97-1	18.38	4
3716	32	AP-D93*7163	17.77	3
3717	33	AP-D94-5389	17.74	3
3718	34	AP-D94-5282	17.25 *	2

ta provided by P.L. Finney, USDA-ARS, Soft Wheat Quality Lab, Wooster, OH

ATTACHMENT IAPPLICATION FOR APPROVAL OF X CULTIVARS ___ASSOCIATE CULTIVARS
(Please check appropriate type of application)

1. Crop: Wheat
2. Experimental no. or name: ~~GA 89482E7~~ 'A6S 2000' MAH
6/4/2001
3. Pedigree and history: Pioneer 2555/PF 84301//FL302. The final cross was made in the fall of 1989. PF 84301 is an experimental line from Brazil. The F1 was grown in the field during the 1990 season. Individual spike selections were made in the F2 to F6 generations at Griffin, GA. The pedigree method of breeding was used to advance the segregating populations. In 1995, a headrow was harvested for preliminary evaluations. Agronomic evaluations were conducted in 1996 in Elite Nursery trials and during 1997 and 1998 in the Small Grain State Performance trials for Georgia. It was evaluated in 1998 in the Uniform Southern Wheat Nursery.
4. Description: GA 89482E7 is a high yielding, medium-maturing, awned, white chaffed, a medium-tall stature at maturity with good straw strength and with high test weight. It matures on average 1 day earlier than GA Gore. It is resistant to currently predominant races of powdery mildew, moderately resistant to leaf rust and resistant to biotypes of Hessian fly in Georgia.
5. Station(s) where developed: Georgia
6. Participating scientist(s): Jerry Johnson, Barry Cunfer, G. David Buntin, and Dan Bland
7. In what respect is the new cultivar superior to the cultivar now in use? or reasons for proposing release as an associate cultivar.

GA 89482E7 is a high yielding (Tables 1, 2, 3, 6, 9) and a high test weight (Tables 1, 2, 4, 7, 10) line with medium maturity. In comparison to the most popular medium maturing varieties, GA 89482E7 was better than or equal to Coker 9835 and Pioneer 2684 for grain yield performance (Table 2, 3 and 6). For 2-year average at five locations in the state performance trials in Georgia (Table 9), GA 89482E7 yielded significantly better than Coker 9835 at Tifton; Pioneer 2684 at Tifton and Griffin; and both Coker 9835 and Pioneer 2684 over the five locations.

GA 89482E7 showed no difference for test weight (58.2 lbs/bu.) from P 2684 or C 9663 which are varieties with exceptional high test weight (Tables 4, 7,

AGS 2000

MAH
6/4/2001

10) but has better test weight than C 9835. ~~GA 89482E7~~ has equal (excellent) resistance to lodging as compared to the Coker 9835 and Pioneer 2684 (Tables 1, 2, 4, 7, 10).

GA 89482E7 possesses excellent resistance to powdery mildew (Tables 5, 8, 11) which is equal to P 2684 and better than C 9835 or C 9663. Ga 89482E7 is no worse for susceptibility to leaf rust than Coker 9835 and Pioneer 2684 (Tables 5, 8, and 11). GA 89482E7 has shown to have excellent resistant to Hessian fly (Tables 5 and 8) which is equal to Coker 9835 and Pioneer 2684. In regional trials, GA 89482E7 yielded higher than the current grown check cultivars Coker 9835 and similar to the new check, Coker 9663, in the southeastern region (24 locations) (Table 12). Out of 34 entries, GA 89482E7 ranked 5th for yield in entry means across all locations.

8. Method of propagation: Seed

9. Amount of breeder seed stocks available (if applicable): 20 bu.

10. Amount of foundation seed stocks available (if applicable): 1000 bu./ 1999

11. Amount of cutting or bud material available for vegetatively propagated material for nursery distribution (if applicable):

12. Is there likely to be unusual difficulty encountered in the production of any class of seed stocks? Explain. No

13. Three suggested names for the cultivar: Moss, Houston, Sumter

14. Name approved by plant cultivar and germplasm release committee: Moss

15. Form of intellectual property protection: Plant Variety Protection

16. Is a royalty assessment recommended: ☒ Yes ☐ No

MAH
6/4/01
GA-89482E7 'AGS 2000'

RECOMMENDED BY:

A. _____
Originating ScientistB. _____
Department HeadC. _____
Assistant DeanD. _____
Chairperson, GAES Plant Cultivar
and Germplasm Release CommitteeE. _____
Associate Dean for Research

APPROVED:

Dean and Director
College of Agricultural & Environmental Sciences

Table 1. Average performance of GA 89482E7 and check cultivars in Preliminary Nursery at two locations (Plains and Griffin), 1995.

Entry	Yield Bu/A	Test Wt. lbs/bu ₁	Lodging %	Date Headed ₁	Height in
GA 89482E7 AGS 2000	87.6	60.1	5	3/29	38
C 9134	74.2	58.3	5	4/07	37
C 9835	65.4	58.9	0	4/06	30
Dozier	68.6	61.3	0	4/10	35
P 2684	75.8	61.4	0	4/03	36

₁ Plains

Table 2. Average performance of GA 89482E7 and check cultivars in Elite Nurseries at two locations (Plains and Midville), 1996.

Entry	Yield Bu/A	Test Wt. lbs/bu ₁	Lodging %	Date Headed ₁	Height in
GA 89482E7 AGS 2000	94.2a	58.9	0	4/20	37
C 9134	94.7a	58.5	5	4/20	41
C 9835	90.4ab	58.6	0	4/19	32
Dozier	85.7c	60.3	0	4/23	34
P 2684	88.6bc	62.4	0	4/17	36

₁ Plains

Table 3. Average yield performance of GA 89482E7 and check cultivars in State Performance Trials at five locations in 1997.

Entry	Location					Average
	Tifton	Plains	Midville	Griffin	Calhoun	
GA 89482E7 A65 2000	57.1a	32.5c	63.5a	86.9a	57.8a	59.6a
C 9835	49.0bc	56.8a	62.5ab	86.3a	49.4b	60.8a
C 9663	50.3b	45.9b	63.5a	78.7b	60.4a	59.8a
P 2684	53.8ab	47.8b	62.7ab	90.8a	59.6a	62.9a
Gore	47.3b	24.6d	57.5b	74.6b	48.0b	50.4b

Table 4. Performance of GA 89482E7 and check cultivars in state performance trials for 1997.

Entry	Test Wt. lbs/bu	Lodging %	Date Headed	Height in
GA 89482E7 A65 2000	58.0a	12a	3/28	37
C 9835	55.4b	10a	3/29	33
C 9663	57.2a	16a	3/28	38
P 2684	58.0a	8a	3/27	36
Gore	55.0b	44b	3/29	34

Table 5. Average performance of GA 89482E7 and check cultivars in state performance trials for 1997.

MAH
6/4/2001

Entry	Leaf Rust ¹ %	Powdery Mildew ² %	Hessian Fly ³ %	Septoria nodorum ⁴ %
GA 89482E7 A6S 2000	25b	0a	5a*	4
C 9835	30b	13b	11a	55
C 9663	0a	16b	5a	22
P 2684	45b	0a	8a	10
Gore	44b	1a	29b	15

¹ Tifton, Plains, Griffin

² Tifton, Griffin

³ Griffin, * Coker 9803 had 60% infestation.

⁴ Tifton, Griffin, Calhoun

Table 6. Average yield performance of GA 89482E7 and check cultivars in State Performance Trials at five locations in 1998.

Entry	Location					Average
	Tifton	Plains	Midville	Griffin	Calhoun	
GA 89482E7 A6S 2000	66.4a	72.7a	37.1a	92.1a	53.0ab	64.3a
C 9835	62.5ab	55.4c	21.9b	83.7a	55.3ab	55.8b
C 9663	43.7c	64.6b	18.2b	73.5b	60.9a	52.2bc
P 2684	56.0b	64.4b	37.9a	69.9b	45.1bc	54.7bc
Gore	49.2c	64.0b	11.4c	69.2b	38.7c	46.5c

Table 7. Performance of GA 89482E7 and check cultivars in state performance trials for 1998.

Entry	Test Wt. lbs/bu	Lodging %	Date Headed	Height in
GA 89482E7 AGS 2000	58.4a	1a	4/13	37
C 9835	55.1b	1a	4/15	32
C 9663	57.6a	15a	4/14	40
P 2684	58.8a	3a	4/14	36
Gore	56.1b	13a	4/16	35

Table 8. Average performance of GA 89482E7 and check cultivars in state performance trials for 1998.

Entry	Leaf Rust ¹ %	Powdery Mildew ² %	Hessian Fly ³ %	Septoria nodorum ⁴ %
GA 89482E7 AGS 2000	1a	0a	2a	34
C 9835	100b	21b	6a	7
C 9663	10a	35b	10a	9
P 2684	100b	0a	0a	8
Gore	98b	1a	1a	6

¹ Plains

² Tifton

³ Plains, * Coker 9803 had a 59% infestation.

⁴ Tifton, Plains

Table 9. Average yield performance of GA 89482E7 and check cultivars over 2 years (1997-1998) at five locations.

Entry	Location					Average
	Tifton	Plains	Midville	Griffin	Calhoun	
GA 89482E7 'AGS 2000'	61.7a	52.6a	50.3a	89.5a	55.4ab	61.9a
C 9835	55.8b	56.1a	42.2a	85.0ab	52.3b	58.3b
C 9663	47.0c	55.2a	40.9a	76.1c	60.6a	56.0b
P 2684	54.9b	56.1a	50.3a	80.6bc	52.4b	58.9b
Gore	48.0c	44.3a	34.4a	71.9c	43.3c	48.4c

Table 10. Average performance of GA 89482E7 and check cultivars over 2 years (1997-1998).

Entry	Test Wt. lbs/bu	Lodging %	Date Headed	Height in
GA 89482E7 'AGS 2000'	58.2a	7a	4/07	37
C 9835	55.2b	6a	4/08	33
C 9663	57.4a	16a	4/08	39
P 2684	58.4a	6a	4/08	36
Gore	55.5b	29a	4/08	35

Table 11. Average performance of GA 89482E7 and check cultivars over 2 years (1997-1998).

Entry	Leaf Rust %	Powdery Mildew %	Hessian Fly %	Septoria nodorum %
<i>'AGS 2000'</i> GA-89482E7	13a	0a	2a	19
C 9835	65b	17b	7a	31
C 9663	0a	25b	7a	16
P 2684	73b	0a	2a	9
Gore	71b	1a	8a	12

Table 12 . Average performance of GA 89482E7 and check cultivars in the Uniform Southern Soft Red Winter Wheat Nursery (24 Trials)+, 1998.

Entry	Yield Bu/A	Test Wt Lbs/Bu	Date Headed	Lodging	Height	Leaf Rust, %	Powdery Mildew, %
<i>'AGS 2000'</i> GA-89482E7	60.4	56.7	114	16	34	15	1
C 9835	56.8	53.8	117	1	31	24	30
C 9633	60.2	57.4	116	28	38	2	35
FL 302	50.8	52.9	117	10	36	35	24

+ States and (number of Locations) tested: Alabama (1), Arkansas (2), Florida (1), Georgia (2), Idaho (1), Kansas (2), Kentucky (2), Maryland (1), Missouri (1), Mississippi (1), North Carolina (2), Ohio (1), Pennsylvania (1), South Carolina (3), Tennessee (1), Texas (1), Virginia (1).

Table 13. Average yield performance of GA 89482E7 and check cultivars in the Uniform Nursery by locations in 1998.

Entry	Location							Avg
	AL	SC-C	SC-F	SC-S	NC-K	NC-R	FL	GA
<i>MAH</i> <i>6/4/01</i> 'ABS 2000' GA 89482E7	54	99	41	70	41	72	48	86
C 9835	56	81	41	63	38	65	50	75
C 9663	61	87	36	53	40	73	57	80
Mason	55	87	45	72	41	66	45	81
P 26R61	53	72	33	77	34	56	50	72

AL: Bella Mina
 SC-C: Clemson
 SC-F: Florence
 SC-S: St. Mathews
 NC-K: Kinston
 NC-R: Rowland
 FL: Marianna
 GA: Plains

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) University of Georgia Research Foundation <i>University of Florida Agricultural Experiment Station</i>	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER GA89482E7	3. VARIETY NAME 89482E7 <i>'AGS 2000'</i>
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) Boyd Graduate Studies Building D.W. Brooks Drive Athens, GA 30602-7411	5. TELEPHONE (include area code) (706) 542-6512	6. FAX (include area code) (706) 542-3837
7. PVPO NUMBER <i>200000141</i>		

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain. ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company? ☒ YES ☐ NO
If no, give name of country

10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?

☐ YES ☐ NO If no, give name of country

b. If original rights to variety were owned by a company(ies), is(are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (if needed, use reverse for extra space):

SEE ATTACHED

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

STD-470-E (07-97) (Destroy previous editions).

Electronic version designed using WordPerfect InForms by USDA-AMS-IMB.

2000001417

EXHIBIT E
STATEMENT OF APPLICANT'S OWNERSHIP

MAH
6/4/01
Wheat - 89482E7 'AGS 2000'

The variety for which plant variety protection is hereby sought is owned jointly by the University of Georgia Research Foundation, Inc. (UGARF) and the Florida Agricultural Experiment Stations, University of Florida (FAES).

Ownership by UGARF in the variety for which plant variety protection is hereby sought is based on the Patent Policy approved by the Board of Regents of the University System of Georgia on June 9, 1982, in which the Board of Regents assigned to the University of Georgia Research Foundation, Inc. all rights in intellectual property developed or created by employees at The University of Georgia, one of the universities of the University System of Georgia. Rights of novel plant varieties developed at The University of Georgia, including '89482E7', are covered by said Patent Policy. As employees of The University of Georgia, Jerry W. Johnson, Barry Cunfer, and G. David Buntin, pursuant to said Patent Policy, have assigned their rights in '89482E7' to the University of Georgia Research Foundation, Inc.

Ron Barnett and Paul Pfahler are employees of the Florida Agricultural Experiment Stations, the University of Florida.